

In the claims:

1. A method of forming a brake assembly for a motor vehicle comprising;
providing a wheel hub having a neck portion and
5 a flange portion, said flange portion having a flange face;
forming a plurality of bolt receiving holes in said flange face;
finishing said flange face in order to flatten
10 said flange face out;
placing said wheel hub in rotational communication with a knuckle;
securing a brake rotor to said flange face of said wheel hub; and
15 final finishing at least one surface of said brake rotor in order to reduce lateral run-out of said brake rotor.
2. The method of claim 1, wherein said step of final finishing includes forming said at least one
20 surface of said brake rotor such that it is flat.
3. The method of claim 1, further comprising:
locating the brake assembly into a fixture assembly prior to said step of final finishing.
4. The method of claim 1, further comprising:
25 providing a knuckle having a bearing retention structure formed therein.

5. The method of claim 4, wherein said bearing retention structure is a generally circular bore formed in said knuckle.

6. The method of claim 5, further comprising:
5 snap-fitting a bearing having an inner race and an outer race into said bore.

7. The method of claim 6, wherein said bearing is located in said bore between a lower shoulder portion and an upper snap ring.

10 8. The method of claim 5, wherein said bearing is only partially disposed in said bore.

9. The method of claim 1, further comprising:
integrally forming an outer race of said bearing with said knuckle.

15 10. The method of claim 1, further comprising:
integrally forming an inner race of said bearing with said neck portion.

11. The method of claim 1, wherein said brake rotor is secured to said wheel hub by a plurality of
20 wheel bolts passed through a respective one of said plurality of bolt receiving holes.

12. A method for manufacturing a brake assembly, comprising:

providing a wheel hub having a neck portion and
25 a flange portion;

locating a bearing into a generally circular bore formed in a knuckle;

journaling said neck portion of said wheel hub into said bearing to allow rotation of said wheel hub
5 with respect to said knuckle;

securing a brake rotor in communication with an outer surface of said wheel hub; and

final finishing at least one surface of said brake rotor whereby lateral run-out of said brake rotor
10 to one or more brake pads is minimized.

13. The method of claim 12, further comprising:

forming a relief channel in said flange face and forming said plurality of bolt holes in said relief
15 channel.

14. The method of claim 12, further comprising:

finishing said at least one wheel hub outer surface prior to securing said brake rotor thereto.

20 15. The method of claim 12, further comprising locating said assembly in a clamping fixture.

16. The method of claim 12, further comprising:

press-fitting a wheel bolt into each of said
25 plurality of bolt receiving holes prior to said step of final finishing.

17. The method of claim 12, further comprising:

press-fitting said bearing into said knuckle bore.

18. The method of claim 12, further comprising:

5 integrally forming an outer race of said bearing with said knuckle.

19. The method of claim 12, further comprising:

10 integrally forming an inner race of said bearing with said neck portion of said wheel hub.

20. The method of claim 12, wherein parallelism between said at least one surface of said rotor and a plurality of brake caliper ears is maintained.